

Amendments to the Claims:

This listing of the claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1-19 (Cancelled).

20. (Withdrawn/Currently Amended). A method for the treatment of a disease, which disease involves signalling of a cytokine through cyc in the pathogenesis of said disease, comprising administering to a subject in need an amount effective to bind to cyc and inhibit cyc/NIK interaction, of a polypeptide comprising:

(a) NF- κ B inducing kinase (NIK); ~~or a mutant,~~

(b) a variant of (a) that maintains at least 90% sequence identity with (a) and maintains the ability thereof to bind to cyc and inhibit cyc/NIK interaction, ~~fusion protein,~~

(c) a pharmaceutically acceptable functional derivative of (a) prepared from the functional groups present on the lateral chains of the amino acid moieties or on the terminal N- or C- groups of the polypeptide of (a), that maintains the ability of (a) to bind to cyc and inhibit cyc/NIK interaction;

(d) a circularly permuted derivative of (a)
that maintains the ability thereof to bind to
cyc and inhibit cyc/NIK interaction; or

(e) a fragment thereof of (a), which maintains the
ability thereof to bind to cyc and inhibit
cyc/NIK interaction,

with the proviso that the cytokine is other than IL-2.

21. (Withdrawn). The method according to claim
20, wherein the cytokine is IL-12.

22. (Withdrawn). The method according to claim
20, wherein the cytokine is IL-15.

23. (Withdrawn). The method according to claim
20, wherein the fragment of NIK comprises the C-terminus of
NIK (from residue 624 to 947, SEQ ID NO:19).

24. (Withdrawn). The method according to claim
20, wherein the fragment of NIK comprises NIK 640-720 (SEQ
ID NO: 18).

25. (Withdrawn). The method according to claim
20, wherein the mutant of NIK is AlyNIK.

26-65 (Cancelled).

66. (Currently Amended). A method for the
treatment and/or prevention of a disease in which activation
of a cytokine, having the common gamma chain (cyc) in its

receptor, is involved in the pathogenesis of the disease, comprising administering to a subject in need an amount effective to bind to *cyc* and inhibit *cyc*/NIK interaction, of a polypeptide comprising:

- (a) a fragment of NF- κ B inducing kinase (NIK), comprising the *cyc* binding domain (SEQ ID NO: 18), which maintains the ability thereof to bind to *cyc* and inhibit *cyc*/NIK interaction;
- (b) ~~or a mutant,~~ variant of (a) that maintains at least 90% sequence identity with (a) and maintains the ability thereof to bind to *cyc* and inhibit *cyc*/NIK interaction;
- (c) ~~, fusion protein,~~ a pharmaceutically acceptable functional derivative of (a) prepared from the functional groups present on the lateral chains of the amino acid moieties or on the terminal N- or C- groups of the polypeptide of (a), that maintains the ability of (a) to bind to *cyc* and inhibit *cyc*/NIK interaction; or
- (d) ~~a~~ circularly permuted derivative of (a) that ~~or fragment thereof,~~ which maintains the ability thereof to bind to *cyc* and inhibit *cyc*/NIK interaction.

67. (Original). A method according to claim 66, wherein IL-2 is involved in the pathogenesis of the disease.

68. (Withdrawn). A method according to claim 66, wherein IL-15 is involved in the pathogenesis of the disease.

69. (Currently Amended). A method of treatment and/or prevention of a disease in which NF- κ B inducing kinase (NIK) and *cyc* interaction is involved in the pathogenesis of said disease, comprising administering to a subject in need thereof an amount effective to bind to *cyc* and inhibit *cyc*/NIK interaction, of a polypeptide comprising:

(a) a fragment of NIK comprising the *cyc* binding domain (SEQ ID NO: 18), which maintains the ability thereof to bind to *cyc* and inhibit *cyc*/NIK interaction;

(b) ~~or a mutant,~~ variant of (a) that maintains at least 90% sequence identity with (a) and maintains the ability thereof to bind to *cyc* and inhibit *cyc*/NIK interaction;

(c) ~~, fusion protein,~~ a pharmaceutically acceptable functional derivative of (a) prepared from the functional groups present on the lateral chains of the amino acid moieties or on the

terminal N- or C- groups of the polypeptide of
(a), that maintains the ability of (a) to bind
to cyc and inhibit cyc/NIK interaction; or
(d) ~~a~~ a circularly permuted derivative of (a)
~~that or fragment thereof, which~~ maintains the
ability thereof to bind to cyc and inhibit
cyc/NIK interaction.

70. (Currently Amended). A method of treatment and/or prevention of a disease in which NF- κ B activation is involved, comprising administering to a subject in need thereof an amount effective to bind to cyc and inhibit cyc/NIK interaction, of a polypeptide comprising:

- (a) a fragment of NF- κ B inducing kinase (NIK)
corresponding to the cyc binding domain (SEQ
ID NO: 18), which maintains the ability
thereof to bind to cyc and inhibit cyc/NIK
interaction;
- (b) ~~or a mutant,~~ variant of (a) that maintains at
least 90% sequence identity with (a) and
maintains the ability thereof to bind to cyc
and inhibit cyc/NIK interaction;
- (c) ~~, fusion protein,~~ a pharmaceutically acceptable
functional derivative of (a) prepared from the

functional groups present on the lateral chains of the amino acid moieties or on the terminal N- or C- groups of the polypeptide of (a), that maintains the ability of (a) to bind to cyc and inhibit cyc/NIK interaction; or
(d) ~~a~~ a circularly permuted derivative of (a) that ~~or fragment thereof, which~~ maintains the ability thereof to bind to cyc and inhibit cyc/NIK interaction.

71 (Cancelled).

72. (Withdrawn). A method according to claim 69, for the treatment of cancer.

73. (Currently Amended). A method of treatment and/or prevention of a disease resulting from excessive immune responses, comprising administering to a subject in need thereof an amount effective to bind to cyc and inhibit cyc/NIK interaction, of a polypeptide comprising:

- (a) a fragment of NF- κ B inducing kinase (NIK) corresponding to the cyc binding domain (SEQ ID NO: 18), which maintains the ability thereof to bind to cyc and inhibit cyc/NIK interaction;
(b) ~~or a mutant,~~ variant of (a) that maintains at least 90% sequence identity with (a) and

maintains the ability thereof to bind to cyc
and inhibit cyc/NIK interaction;

- (c) ~~, fusion protein,~~ a pharmaceutically acceptable
functional derivative of (a) prepared from the
functional groups present on the lateral
chains of the amino acid moieties or on the
terminal N- or C- groups of the polypeptide of
(a), that maintains the ability of (a) to bind
to cyc and inhibit cyc/NIK interaction; or
- (d) ~~a~~ circularly permuted derivative of (a)
that ~~or fragment thereof, which~~ maintains the
ability thereof to bind to cyc and inhibit
cyc/NIK interaction.

74. (Original). A method according to claim 73,
for the treatment of rheumatoid arthritis, osteoarthritis,
inflammatory bowel disease, asthma, cardiac infarct,
Alzheimer's disease, or atherosclerosis.

75. (Previously Presented). A method according
to claim 69, for the treatment of rheumatoid arthritis,
osteoarthritis, inflammatory bowel disease, asthma, cardiac
infarct, Alzheimer's disease, or atherosclerosis.

76 (Currently amended). A method for the
treatment of a disease, which disease involves signalling of
a cytokine through cyc in the pathogenesis of said disease,

comprising administering to a subject in need an amount effective to bind to cyc and inhibit cyc/NIK interaction, of a polypeptide comprising:

- (a) a fragment of NF- κ B inducing kinase (NIK) comprising NIK 640-720 (SEQ ID NO:18), which maintains the ability thereof to bind to cyc and inhibit cyc/NIK interaction;
- (b) ~~or a mutant,~~ variant of (a) that maintains at least 90% sequence identity with (a) and maintains the ability thereof to bind to cyc and inhibit cyc/NIK interaction;
- (c) ~~, fusion protein,~~ a pharmaceutically acceptable functional derivative of (a) prepared from the functional groups present on the lateral chains of the amino acid moieties or on the terminal N- or C- groups of the polypeptide of (a), that maintains the ability of (a) to bind to cyc and inhibit cyc/NIK interaction; or
- (d) ~~, a~~ circularly permuted derivative of (a) that ~~or fragment thereof,~~ which maintains the ability thereof to bind to cyc and inhibit cyc/NIK interaction.